Signature

PTO/SB/05 (08-03)
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U.S. Patent and Trademark Office, U.S. DEPARTMENT OF COMMERCE

Date

March 10, 2004

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number Attorney Docket No. Serie 6145 UTILITY Michel DELZENNE PATENT APPLICATION First Inventor TRANSMITTAL Title Plasma cutting torch electrode with an Hf/Zr insert (Only for new nonprovisional applications under 37 CFR 1.53(b)) Express Mail Label No. EV 388268693 US Mail Stop Patent Application Commissioner for Patents APPLICATION ELEMENTS ADDRESS TO: P.O. Box 1450 See MPEP chapter 600 concerning utility patent application contents. Alexandria VA 22313-1450 Fee Transmittal Form (e.g., PTO/SB/17)
 (Submit an original and a duplicate for fee processing) CD-ROM or CD-R in duplicate, large table or Computer Program (Appendix) 2 🔲 Applicant claims small entity status. Nucleotide and/or Amino Acid Sequence Submission See 37 CFR 1.27. (if applicable, all necessary) 3. **X** Specification [Total Pages_ Computer Readable Form (CRF) (preferred arrangement set forth below)
- Descriptive title of the invention Specification Sequence Listing on: - Cross Reference to Related Applications
- Statement Regarding Fed sponsored R & D
- Reference to sequence listing, a table,
or a computer program listing appendix
- Background of the Invention

Refer Suppose of the Invention

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 i. CD-ROM or CD-R (2 copies); or ii. Paper Brief Summary of the Invention
 Brief Description of the Drawings (if filed) c. Statements verifying identity of above copies Detailed Description **ACCOMPANYING APPLICATION PARTS** Claim(s) - Abstract of the Disclosure Assignment Papers (cover sheet & document(s)) Power of 4. X Drawing(s) (35 U.S.C. 113) [Total Sheets 10. 37 CFR 3.73(b) Statement (when there is an assignee) Attorney 5. Oath or Declaration 11. 🔯 (Total Sheets English Translation Document (if applicable) a. Newly executed (original or copy) Information Disclosure Copies of IDS 12. Statement (IDS)/PTO-1449 Citations b. Copy from a prior application (37 CFR 1.63(d)) 13. 🔼 **Preliminary Amendment** (for continuation/divisional with Box 18 completed) Return Receipt Postcard (MPEP 503) 14. X (Should be specifically itemized) <u>DELETION OF INVENTOR(S)</u> Signed statement attached deleting Inventor(s) name in the prior application, see 37 CFR 1.63(d)(2) and 1.33(b). 15 🔲 Certified Copy of Priority Document(s) (if foreign priority is claimed)
Nonpublication Request under 35 U.S.C. 122 16. 🔲 (b)(2)(B)(i). Applicant must attach form PTO/SB/35 or its equivalent. Application Data Sheet, See 37 CFR 1.76 6. 🔲 17. 🔲 Other: 18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in the first sentence of the specification following the title, or in an Application Data Sheet under 37 CFR 1.76: Continuation-in-part (CIP) Continuation Divisional of prior application No.: Prior application information:

Examiner

For CONTINUATION OF DIVISIONAL APPS only; The entire disclosure of the prior application, from which an eath or declaration is supplied under Box 6b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference.

The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts. 19. CORRESPONDENCE ADDRESS Customer Number. OR Correspondence address below Name Linda K. Russell Air Liquide Address 2700 Post Oak Blvd., Suite 1800 City Zip Code 77056 Houston Texas ex (713) 624-8950 Country Telephone (713) 624-8956 USA Name (Print/Type) Linda K. Russell Registration No. (Attorney/Agent) 34.918

This collection of information is required by 37 CFR 1.53(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop Patent Application, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

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o a collection of information unless it displays a valid OMB control number. Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection Complete if Known FEE TRANSMITTAL Not yet assigned **Application Number** Herewith for FY 2004 Filing Date Michel DELZENNE First Named Inventor Effective 10/01/2003, Patent fees are subject to annual revision. **Examiner Name** Applicant claims small entity status. See 37 CFR 1.27 Art Unit **TOTAL AMOUNT OF PAYMENT** (\$) 770.00 Serie 6145 Attorney Docket No. METHOD OF PAYMENT (check all that apply) FEE CALCULATION (continued) 3. ADDITIONAL FEES Money Other Check Credit card arge Entity , Small Entity Deposit Account: Fee Code Fee (\$) Fee Code Fee Description Deposit (5) Fee Paid 01-1375 Account 65 Surcharge - late filing fee or oath 1051 130 2051 Numbe 25 Surcharge - late provisional filing fee or cover sheet 1052 50 2052 Linda K. Russell Name 1053 130 1053 130 Non-English specification Director is authorized to: (check all that apply) 1812 2,520 For filing a request for ex parte reexamination 1812 2,520 Charge fee(s) indicated below Credit any overpayments 920° Requesting publication of SIR prior to Examiner action 1804 9201 1804 Charge any additional fee(s) or any underpayment of fee(s) Charge fee(s) indicated below, except for the filing fee 1805 1,840 1805 1.840° Requesting publication of SIR after to the above-identified deposit account. Examiner action 1251 2251 55 Extension for reply within first month 110 **FEE CALCULATION** 210 Extension for reply within second month 1252 420 2252 1. BASIC FILING FEE 475 Extension for reply within third month arge Entity Small Entity Fee Paid Fee Description 1254 1,480 2254 740 Extension for reply within fourth month 1255 2.010 2255 1,005 Extension for reply within fifth month 1001 770 2001 385 Utility filing fee 1401 330 2401 165 Notice of Appeal 1002 340 2002 170 Design filing fee 330 1402 2402 165 Filing a brief in support of an appeal 1003 530 2003 265 Plant filing fee 1403 290 2403 145 Request for oral hearing 1004 770 2004 385 Reissue filina fee 1005 160 1451 1.510 1451 1,510 Petition to institute a public use proceeding 2005 80 Provisional filing fee 1452 55 Petition to revive - unavoidable 110 2452 SUBTOTAL (1) (\$) 770.00 1453 1,330 2453 665 Petition to revive - unintentional 2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE 1501 1,330 2501 665 Utility issue fee (or reissue) Fee in below 18 Extra Claims 1502 480 2502 240 Design issue fee 19 - 20 = Total Claims 1503 640 2503 320 Plant issue fee Independent Claims 3 .3~ = 0 x 86 130 Petitions to the Commissioner 1460 130 1460 Multiple Dependent 1807 50 1807 50 Processing fee under 37 CFR 1.17(g) Large Entity Small Entity 1806 180 180 Submission of Information Disclosure Strnt 1806 Fee Fee Code (\$) Fee Description 40 Recording each patent assignment per Code (\$) 8021 40 8021 property (times number of properties) Claims in excess of 20 1202 2202 9 18 385 Filing a submission after final rejection (37 CFR 1.129(a)) 1809 770 2809 1201 86 43 Independent claims in excess of 3 385 For each additional invention to be examined (37 CFR 1.129(b)) 1203 290 2203 145 Multiple dependent claim, if not paid 1810 770 Reissue independent claims 1204 86 2204 43 over original patent 1801 770 2801 385 Request for Continued Examination (RCE) Reissue claims in excess of 20 900 Request for expedited examination of a design application 1802 900 1802 1205 18 2205 and over original patent Other fee (specify) 0.00 (\$) SUBTOTAL (2) *Reduced by Basic Filing Fee Paid SUBTOTAL (3) (\$) **or number previously paid, if greater, For Reissues, see above SUBMITTED BY (Complete @applicable)) Registration No. Linda K. Russell Name (Print/Type) 34,918 Telephone (713) 624-8956 March 10, 2004 Signature

> WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

PTO/SB/06 (08-03)

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PATENT APPLICATION FEE DETERMINATION RECORD

Application or Docket Number. PATENT APPLICATION FEE DETERMINATION RECORD Serie 6145 Substitute for Form PTO-875 CLAIMS AS FILED - PART I OTHER THAN SMALL ENTITY OR SMALL ENTITY (Column 1) (Column 2) FOR NUMBER FILED NUMBER EXTRA RATE FEE RATE FEE BASIC FEE (37 CFR 1.18(a)) \$770.00 OR TOTAL CLAIMS 19 0 (37 CFR 1.15(c)) minus 20 = x : 18 -0.00 OR INDEPENDENT CLAIMS 3 0 x s<u>86</u> minus 3 = 0.00 X 8 OR MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.18(d)) OR \$770.00 " If the difference in column 1 is less than zero, enter "0" in column 2. TOTAL OR TOTAL CLAIMS AS AMENDED - PART II OTHER THAN OR (Column 2) (Column 3) (Column 1) SMALL ENTITY SMALL ENTITY HIGHEST CLAIMS REMAINING NUMBER PREVIOUSLY PRESENT ADDI-TIONAL RATE ADDI-AFTER AMENDMENT AENT EXTRA TIONAL PAID FOR FEE Total (37 CFR 1.100 Minus ENDN Minus Independent (37 CFR 1.16(b)) OR FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1,16(d)) OR TOTAL TOTAL ADD'L FEE OR ADD'L FEE (Column 1) (Column 2) (Column 3) CLAIMS HIGHEST $\mathbf{\omega}$ REMAINING PRESENT NUMBER RATE ADDI-TIONAL RATE ADDI-TIONAL AFTER AMENDMENT EXTRA ENDMENT PAID FOR FEE FEE Total (37 CFR 1.16(e)) OR Independent (37 CFR 1.16(s)) OR FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(d)) OR TOTAL TOTAL ADD'L FEE ADD'L FEE OR (Column 1) (Column 2) (Column 3) CLAIMS HIGHEST PRESENT REMAINING NUMBER RATE ADDI-TIONAL ADDI-TIONAL **AMENDMENT** AFTER **EXTRA** AMENOMENT PAID FOR FEE Total (37 CFR 1.18(c)) OR Independent (37 CFR 1,16(b)) OR FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(d)) OR TOTAL ADD'L FEE OR ADD'L FEE

• If the entry in column 1 is less than the entry in column 2, write "O" in column 3.

— If the "Highest Number Previously Paid For" in THIS SPACE is less than 20, enter "20".

— If the "Highest Number Previously Paid For" in THIS SPACE is less than 3, enter "3".

The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.

This collection of information is required by 3" CFR 1.18. The Information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentially is governed by 35 U.S.C. 122 and 3" CFR 1.14. This collection is astimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the Individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.:

Not yet assigned

Applicant:

Michel DELZENNE

Examiner:

Unknown

US National:

Herewith

TC/A.U:

Unknown

Title:

Plasma cutting torch electrode with an Hf/Zr insert

Docket No.:

Serie 6145

Customer No.:

40582

CERTIFICATE OF MAILING BY EXPRESS MAIL

Mail Stop Patent Application Commissioner for Patents P. O. Box 1450 Alexandria, VA 22313-1450

Dear Sir:

I hereby certify that the following documents, which are attached, are being deposited, under 37 CFR 1.10, with the United States Postal Service "Express Mail Post Office to Addressee" service as **Express Mail No. EV 388268693 US** in an envelope addressed to: Mail Stop Patent Application, Commissioner for Patents, P. O. Box 1450, Alexandria, VA 22313-1450, on **March 10, 2004**.

- 1. English translation of priority application FR 0303185;
- 2. Preliminary Amendment;
- 3. Utility Patent Application Transmittal (PTO/SB/05) (in duplicate);
- 4. Fee Determination Form (PTO/SB/06) (in duplicate);
- 5. Fee Transmittal Sheet (PTO/SB/17) (in duplicate); and
- Postcard.

Respectfully submitted.

Date: March 10, 2004

Diana Guzman

Air Liquide 2700 Post Oak Boulevard, Suite 1800 Houston, Texas 77056 (713) 624-8973